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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,767	08/07/2000	Douglas Dykeman	CH919990018US1	3707
7590	09/20/2004			
Louis P Herzberg IBM Corporation P O Box 218 Yorktown Heights, NY 10598			EXAMINER VOLPER, THOMAS E	
			ART UNIT 2665	PAPER NUMBER

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/633,767

Applicant(s)

DYKEMAN ET AL.

Examiner

Thomas Volper

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12, 14-21, 23-25 and 27-31 is/are rejected.
- 7) ☒ Claim(s) 9, 13, 22 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 10-12, 14-21, 23-25 and 27-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasan et al. (US 6,304,549).

Regarding claims 1, 14, and 27-31, Srinivasan discloses responding to a failed connection between a source and destination node due to a sole-access element of a network structure as seen by the source node (col. 16, lines 56-61 and col. 17, lines 22-25), selecting at least one non-sole-access element of the route used by a failed connection in a network structure (col. 10, lines 5-25), identifying an alternative route for the connection in the network structure which does not utilize the at least one selected element and using the alternative route for establishment of the connection between the nodes (col. 10, lines 25-31). Srinivasan also discloses a topology database for storing information regarding possible routes expressed as Designated Transit Lists (DTLs) (col. 10, lines 16-19). Srinivasan also discloses that when a switch is the cause of failure, it is equivalent to the failure all of the links around the failed switch, thus these links are not part of the possible routes mentioned above for establishing an alternate route, but rather represent non-sole-access links that are not chosen as alternate paths (col. 17, lines 30-35).

Art Unit: 2665

Regarding claims 2 and 15, Srinivasan discloses determining whether an alternative route has enough bandwidth to support the connection (col. 10, lines 25-31), which meets the limitation of checking whether the alternative route satisfies a set of predetermined connection constraints.

Regarding claims 3 and 16, Srinivasan discloses that the element is a link of the network structure (col. 10, lines 25-31).

Regarding claims 4 and 17, Srinivasan discloses selecting all non-sole-access links of the route used by the failed connection that are outside the PNNI peer group of the source node (col. 14, line 62 – col. 15, line 17).

Regarding claims 5, 6, 8, 18, 19 and 21, Srinivasan discloses that for multi-peer group connections, the selection of alternative routes and attempting to setup an alternative route occurs in each peer group along the whole route of the Virtual Path Connection (VPC) (col. 14, line 62 – col. 15, line 17). This meets the limitation of selecting from the set of all non-sole-access links outside of the peer group of the source node the link that is closest to a predetermined one of the source and destination nodes. In this case, the alternative route selection begins in the peer group of the source node, then moves onto the next peer group, the one closest to the peer group of the source node. The first link examined in this next peer group represents the closest link of the non-sole-access links outside of the source node peer group. This alternative route selection procedure propagates along the entire path to the destination node.

Regarding claims 7 and 20, as mentioned above, Srinivasan disclose that the route selection procedure includes determining if a possible route has enough bandwidth to support the connection (col. 10, lines 25-31).

Art Unit: 2665

Regarding claims 10, 12, 23 and 25, Srinivasan discloses continuing to try different alternate routes in the set of possible routes if an attempted connection in a particular peer group fails (col. 11, line 62 – col. 12, line 3). Srinivasan discloses an example wherein a link between A.2.1 and A.3.2 connecting the A.2 and A.3 peer groups is not used do to lack of bandwidth, thus the link between A.2.4 and B.3.3 connecting the A.2 and B peer group is used (col. 10, line 45 – col. 12, line 3). This link clearly does not utilize the closest link. Whenever a connection attempt fails, another possible route is chosen (col. 11, lines 29-35).

Regarding claims 11 and 24, as mentioned above, Srinivasan disclose that the route selection procedure includes determining if a possible route has enough bandwidth to support the connection (col. 10, lines 25-31).

### *Allowable Subject Matter*

3. Claims 9, 13, 22 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Claims 9, 13, 22 and 26 recite the limitation wherein said predetermined node is the destination node. The closest prior art of record, Srinivasan et al. fails to disclose a rerouting procedure that begins by examining possible routes closest to the destination node, rather than starting at the source node and moving towards the final destination.

### *Conclusion*

Art Unit: 2665

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Chen et al. (US 5,831,975) System and Method for Hierarchical Multicast Routing in ATM Networks

- Or et al. (US 6,532,237) Apparatus for and Method of Testing a Hierarchical PNNI Based ATM Network

- Hummel (US 5,831,982) Method for Forming Routing Information in an ATM Communication Network

- Rochberger et al. (US 6,473,408) Building a Hierarchy in an Asynchronous Transfer Mode PNNI Network Utilizing Proxy SVCC-Based RCC Entities.


6. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is (571) 272-3151. The examiner can normally be reached between 8:30am and 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at (571) 272-3155. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Thomas E. Volper

*TEV*

September 13, 2004

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
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